Clinical Benefit of Minimally-Interrupted Dabigatran versus Warfarin for Catheter Ablation of Atrial Fibrillation (ABRIDGE-J):

Should we pardon the interruption?

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Practice patterns for periprocedural anticoagulation for AF ablation vary

- Uninterrupted VKA: 55%
- Uninterrupted NOAC: 4%
- Interrupted NOAC: 10%
- NOAC with 1-2 dose interruption: 15%
- Other: 16%

Meta-analysis of uninterrupted NOAC vs VKA

Major Bleeding

Stroke or TIA

Duke Clinical Research Institute

Cardoso, et al. HeartRhythm. 2017
Interrupted dabigatran (1-2 doses) led to less bleeding compared with uninterrupted warfarin.

Limitations:

- Small sample size
- Not powered to detect difference in stroke rates, complication rates, or subgroups – including timing
- Significant portion of patients received heparin bridging
- Single country experience
2017 HRS/EHRA/ECAS/APHRS/SOLAECE expert consensus statement on catheter and surgical ablation of atrial fibrillation

- Therapeutic warfarin or dabigatran without interruption

- Therapeutic rivaroxaban without interruption

- NOAC other than dabigatran or rivaroxaban without interruption

- Holding 1-2 doses of NOAC before ablation with reinitiation after

Summary

- There are many effective strategies to prevent thromboembolic complications during & after AF ablation

- Study design and randomized trials are challenging due to low complication rates (a good thing)

- Uninterrupted NOAC therapy and minimally interrupted NOAC therapy are both reasonable treatment strategies
Moving Forward

- Future studies should help inform which strategy is best, particularly with respect to the occurrence and management of intraprocedural tamponade.
Thank you
COMPARE: Continued warfarin is superior to interrupted warfarin

- 1584 eligible patients were enrolled
- Underwent randomization and were assigned to:
  - Group 1: warfarin discontinuation (n=790)
  - Group 2: Continuous warfarin (n=794)
- Underwent catheter ablation, assessed for symptomatic periprocedural TE events at 48 hours post-procedure
- 39 Periprocedural TE events:
  - Stroke - 29 (3.7%)
  - TIA - 10 (1.3%)
- Total 2 (0.25%) TE events (both stroke, no TIA)

Graph: Relative Risk Reduction (%)

- Stroke/TIA
- Minor Bleeding

Uninterrupted apixaban vs minimally interrupted apixaban (AEIOU)

IA = held morning dose of apixaban

Uninterrupted Apixaban
Interrupted Apixaban
Uninterrupted Warfarin

**BARC 2 & higher**

- UA: 11.3%
- IA: 9.7%
- UW*: 9.8%

**Major bleeding**

- UA: 1.3%
- IA: 2.1%
- UW*: 1.4%

*Retrospective matched cohort

Reynolds MR. LBCT01-05. Heart Rhythm Society Annual Scientific Sessions; May 10-13, 2017; Chicago.
Uninterrupted Dabigatran versus Warfarin for Ablation in Atrial Fibrillation (RE-CIRCUIT)


Pericardial tamponade: 1 event with dabigatran vs. 6 with warfarin

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<th>Days since Ablation</th>
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<th>Warfarin</th>
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Hazard ratio for dabigatran vs. warfarin during and up to 8 wk after ablation, 0.22 (95% CI, 0.08–0.59)
AXAFA Study Design

**Patients scheduled for catheter ablation of atrial fibrillation**

- Patients receiving four weeks of anticoagulation prior to ablation or
- Patients undergoing transesophageal echocardiography without evidence for left atrial thrombi prior to ablation

- 630 patients, 50 centers (Europe and US)
- primary outcome: “net clinical benefit” composite of bleeding and ischemic events
- brain MRI substudy

**Randomisation** Stratified by type of AF

- Apixaban 5 mg bd (fix dose)
- 2.5 mg bd as in label

**Catheter ablation substudy: Brain MRI 3 - 48 hours after ablation**

- Vitamin K antagonist INR 2-3 (INR controlled)

**- 4 weeks**

**0 days**

**3 months follow-up visit**

**3 months**